A GRADUATED OR SCALAR WOUND ORNAMENTAL MANUFACTURED PRODUCT

Field Of The Invention

The present invention relates to an ornamental manufactured product of the type called "graduated or scalar wound" and to a process for the production of this manufactured product which is capable of producing necklaces, bracelets and similar articles of jewelry.

Background Of The Invention

In the production of necklaces, bracelets and other typical ornamental articles of the goldsmith and para-goldsmith industry the so called "wound necklaces" are well known. These necklaces are formed by means of a thread of precious material wound in a spiral and a strip worked as a woven material, always of precious material, that is inserted in the interior of the spiral with the purpose of conferring on the manufactured product sufficient rigidity and consistency.

At the present state of the art, both the semifinished as well as the finished product defined with the generic term "wound necklace" have a flexible lamina of constant width, that is with the two borders parallel.

Summary Of The Invention

An object of the present invention is to provide a necklace of the wound type which is graduated or scalar, i.e. constituted by portions which have different width, that is the two borders are not completely rectilinear but

are formed by tracts having a course which is converging and/or diverging with respect to the longitudinal axis of the manufactured product.

By way of example, an ornamental manufactured product which has the characteristics of being "graduated or scalar wound" as described herein, is represented by a necklace in which the central section has a width which is greater with respect to the two lateral closing sections.

A further object of this invention is to provide a process to achieve wound necklaces of the "graduated or scalar" type.

Still another object of the invention is to provide a process to obtain manufactured products, specifically, "graduated wound" necklaces in which the width of the lamina degrades with regularity and in a uniform manner as a rule from the center towards the two extremities.

Still another object of the invention is to provide an ornamental product such as a chain, or bracelet or similar products which offers such characteristics as to achieve novel aesthetic results with respect to similar known products, such as the products obtained with chains having interknotted small rings and chains of the Omega type.

The process of the invention capable of providing graduated wound necklaces is characterized by the fact that the spiral winding of the filament of precious material is carried out on a support base consisting of metallic lamina, preferably of aluminum, which approaches a woven strip of

precious material.

A further novel characteristic of the process consists of the fact that the metallic lamina has a shaped profile conforming to the graduated profile which the wound necklace must have.

In operation, the filament thread of precious metal is wound in a spiral around the lamina thus generating a spiralized product having approached spirals with a flow which is increasing/decreasing as defined by the profile of the lamina. After the winding, the manufactured product so obtained, comprising the filament wound on a center piece and constituted by the metallic lamina and the woven strip of precious metal, is immersed in an acidic bath, which causes complete elimination, due to corrosion, of the metallic lamina.

Subsequently, the novel manufactured product, constituted by the filament wound in a spiral on the woven strip, is subjected to a thickening action of the spirals in order to reacquire the space which has become empty due to the elimination of the metallic lamina thus obtaining the semifinished product of the graduated wound necklace. Still subsequently, the semiworked necklace is subjected to further operations such as beating, polishing, glazing and others which transform the product into a finished product, such as necklaces, bracelets, and similar jewelry articles having specific aesthetic qualities.

This invention is extended from necklaces to bracelets

and all other jewelry articles which may be obtained with the process of this invention.

Brief Description Of The Drawings

The characteristics of the invention will be better understood by reference to the drawings in which:

Fig. 1 is an elevational view of a necklace of the "graduated scalar wound" type;

Fig. 2 is a transversal cross sectional view of the necklace of Fig. 1 taken along line II - II of Fig. 1;

Fig. 3 is a view of the base for supporting the winding operation, the base being constituted by the metallic lamina and the woven strip approaching one to the other; and

Fig. 4 is a schematic view of the process of the present invention for the preparation of the necklace of Fig. 1.

Detailed Description Of The Invention

As shown in Fig. 1, a necklace of the "graduated wound" type according to the present invention is characterized by the fact that lamina (1) has a variable width decreasing from the central portion (2) towards the two extremities (3).

In addition, the profile (4), both internal and external, of the lamina decreases in a linear and uniform manner.

As shown in Fig. 2, the necklace, as in any manufactured product of the "wound" type, is constituted by the filament (5) which is wound on a woven strip (6), both made of a precious material.

As shown in Fig. 3, the process for the preparation of the necklaces of the graduated wound type requires at first the base (7) for winding filament (5), the base being constituted by metallic lamina (8) coupled with woven strip (6).

Subsequently as shown in Fig. 4, the winding of the filament is carried out by mounting the base (7) between the two mandrels (9) which put the base (7) in rotation, so that the filament (5), wound on spool (10) is allowed to wind in a spiral on the base. The speed of rotation of the base (7), shown by arrow (x), and the speed of translation of spool (10), shown by arrow (y), transmitted by motors respectively designated (11) and (12) are synchronized by means of an electronics program which regulates the parameters in a manner to always keep optimal the traction force of section (5') of the filament to be wound in a manner that it is always stretched or in tension.

The invention is intended to cover also manufactured products for ornamental use of the graduated wound type which have portions with different width and inclinations of their profiles with respect to the longitudinal axis of the manufactured product, which are still within the scope of the claims.